Summary of Introduction

1. Origin of investigation — Schaffner 1974

2. Titles of 6 sections of paper

3. What do we mean by $P(T/b)$

(a) Distinction between verisimilitude & plausibility.

(b) For non-vanishing $P(T/b)$ we explicate as degree of belief in partial truth or degree to which we believe T points the way to the truth

this notion has two parts.

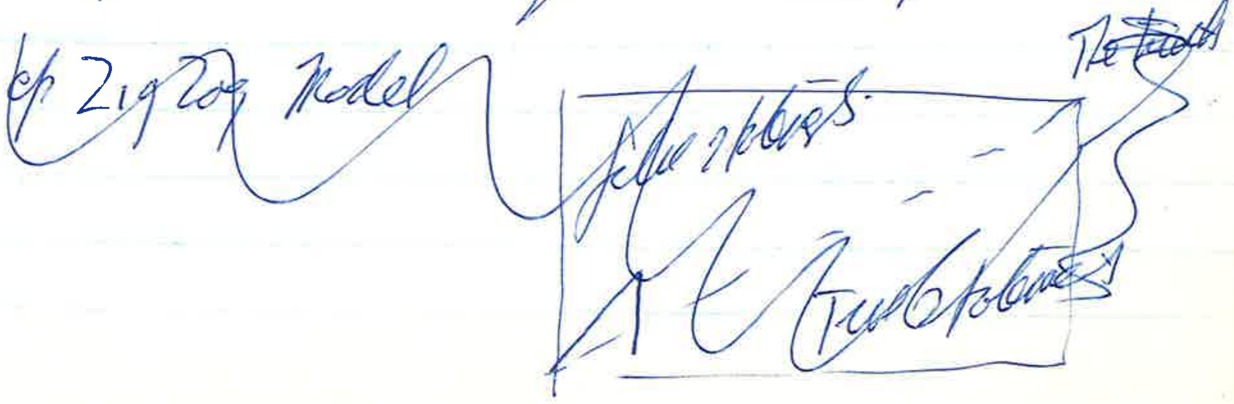
(i) $T \in \{T_i\}_e$, $T_i \sim T_j$ if same empirical account of group of phenomena e and are of equal simplicity.

Conjecture $\lim_{e \to R} \{T_i\}_e = \{\mathcal{T}\}$

(ii) Some of theoretical structure (or component) of T is 'preserved' as chain of theories develops towards $\mathcal{T}$, $T_1 \to T_2 \cdots \mathcal{T}$.

Corresponds to Post's general correspondence principle.

cp Zig Zag Model



Degree to which we believe one of (2) vis à vis competing alternatives is what ~~Salmon~~ Shimony (1970) calls our degree of commitment to a theory.

4.) we then try to describe ~~rationally~~ rationally how degrees of commitment change in the light of evidence.

rationality constraints given by probability calculus either by ① intuition or by ② analogy with situations where ~~betting~~ coherent betting quotient explication appears to be applicable

for ③ from betting quotient applied to scientific theories
or ④ derived from other intuitive principles as in Shimony's paper)
(cf Aczel's Principles)

or ⑤ conjectural rationality falsifiable by failure to provide a rational reconstruction of history of science.
cf Lakatos & Shimony

~~(c)~~ (c) Lakatos dynamics – all theories born refuted.
→ anomalies seen as failure of the ceteris paribus clause.

8. Appraisal of theories:

(a) large empirical content → highly falsifiable

(b) large empirical truth content → confirmed correctly large no of empirical facts

(c) express simple unifying idea → simplicity.

and (d) successful novel predictions → theory is true.

Post criterion — $\Delta E > 0$ (theory confirms a larger no of empirical facts)

. Meta appraisal of different dimension of appraisal

Depends on our view of function of theories

cf Instrumentalism → $\Delta E > 0$
Realism → importance of successful novel predictions i.e. non-ad hoc$_2$.

15 mins.

Concluding Remarks

One can explore our model for the life, death of a research Programme. Such toy models are used in the service of economics. They serve to comprehend in a simple way the competing effects of different factors which could be analyzed but much less transparently without the model. Indeed the deliberation of further toy models in physics, economics and might suggest methodologies of efficient, is an important way of ~~to~~ achieving ~~further~~ progress and enlightenment.